

REMARKS

A total of 28 claims remain in the present application. The present remarks/arguments are presented in response to the Office Action mailed May 18, 2007, wherefore reconsideration of this application is requested.

Referring now to the text of the Office Action, claims 1-8, 10-15, 17-25 and 27-29 stand rejected under 35 U.S.C. § 102(e) as being anticipated by United States Patent No. 6,275,492.(Zhang).

It is believed that the Examiner's claim rejections are fully traversed in view of the following comments.

At page 5 of the Detailed Action, the Examiner argues the following points:

- "Each router has different forwarding tables, thereby having varying information from other routers. The forwarding tables are used to determine whether or not to forward the packet and if so, to which destination. Since router contains differing forwarding data, their forwarding rules differ. Furthermore, the Applicants' specification defines the term " forwarding policy" as a match criteria (paragraph [0023] in Applicant' s specification), which is clearly taught by Zhang' s use of a forwarding table." [Underlining added]
- "The propagation of the LSAs is controlled by the routers that receive the advertised LSA (column 1, line 25-53) by forwarding the LSA to destinations listed in the forwarding table at each router (column 4, line 23-50)."

With respect, the person of ordinary skill in the art will instantly recognise that both of these statements is false.

With particular reference to the Examiner's first argument, the person of ordinary skill in the art will recognise that differing forwarding data is in no way equivalent to differing forwarding rules. The Examiner's own argument provides an explicit example of the

difference. Thus, “forwarding tables are used to determine whether or not to forward the packet and if so, to which destination” Consider two forwarding tables; different data in each forwarding table means that packets will indeed be routed differently. However, identical data in each forwarding table will cause identical routing, because the forwarding rule(logic) in each case is the same. Thus it will be plainly obvious that any differences in packet forwarding (using the two forwarding tables) will be solely due to the data stored in each routing table, not the rules which governs what happens when a match criterion is satisfied.

With particular reference to the Examiner’s second argument, it will be noted that Zhang explicitly distinguishes between the advertisement of LSA’s into the network, and the forwarding of packets by “determin[ing] the best ‘next hop’ router by consulting a forwarding table”. Quite apart from the different language used (“advertising LSAs” vs. “forwarding data packets”), Zhang explicitly teaches that “known routing systems use the data packet’s destination address as the lookup key in the routing table...” [col. 1, lines 47-49]. However, the person of ordinary skill in the art will instantly recall that an LSA does not have a destination address, so “forwarding the LSA to destinations listed in the forwarding table at each router”, as suggested by the Examiner, is plainly impossible.

Furthermore, the person of ordinary skill in the art will recall that, in all of the known link state protocols, advertisement of LSA’s is performed by “flooding” the LSA’s into the network; that is, a router will send LSA’s to every other router to which it is connected. [See, for example http://en.wikipedia.org/wiki/Link-state_routing_protocol], thus:

“First, each node needs to determine what other ports it is connected to, over fully-working links; it does this using a simple reachability protocol which it runs separately with each of its directly-connected neighbours.

Next, each node periodically makes up a short message, the link-state advertisement, which:

- Identifies the node which is producing it.
- Identifies all the other nodes to which it is directly connected.

- Includes a sequence number, which increases every time the source node makes up a new version of the message.

This message is then flooded throughout the network. ... Starting with the node which originally produced the message, it sends a copy to all of its neighbours. “ [underlining added]

Applicant notes that Zhang describes that each router may maintain a listing of known routers in a “router table”. However, it is plainly obvious that a “router table” that identifies known routers, and a “forwarding table” implementing the node’s forwarding policy for routing data packets are two very different things. Furthermore, the mere presence of these tables in a router does not teach or suggest the methods of the present invention. Obviously, a router table containing a listing of known routers facilitates the conventional flooding behaviour for advertising LSAs according to the conventional link state protocols, since it provides the address of all of the known routers, to which an LSA needs to be sent, and doesn’t rely on a (non-existent) destination field in the LSA message. However, nothing in this requires or implies the application of forwarding policies to control or modify the flooding operation in any manner, and nothing in this suggests that the router table might also contain information needed to perform such an operation.

The use of forwarding tables and routing policies for forwarding data packets, and the benefits of such operation, have been well known in the prior art for several years. However, prior to the present invention, it was not known to implement analogous methods to modify the flooding of LSAs. Nor were the benefits of such operation known or described.

Zhang explicitly teaches that conventional link state protocol methods are used for advertising LSAs within the network. Since Zhang provides no teaching or suggestion of policy based forwarding of LSAs, and furthermore provide no teaching or suggestion that different LSA forwarding policies may be implemented in different routers, it follows that Zhang cannot possibly support a rejection of claims under 35 U.S.C. § 102(e).

In light of the foregoing, it is submitted that the presently claimed invention is clearly distinguishable over the teachings of the cited references, taken alone or in any combination.

Thus it is believed that the present application is in condition for allowance, and early action in that respect is courteously solicited.

If any extension of time under 37 C.F.R. § 1.136 is required to obtain entry of this response, such extension is hereby respectfully requested. If there are any fees due under 37 C.F.R. §§ 1.16 or 1.17 which are not enclosed herewith, including any fees required for an extension of time under 37 C.F.R. § 1.136, please charge such fees to our Deposit Account No. 19-5113.

Respectfully submitted,
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Date: August 9 , 2007

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